



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,300	02/13/2004	Stephen B. Powers	MS306158.1/MSFTP563US	7437
27195 7590 01/28/2008 AMIN. TUROCY & CALVIN, LLP 24TH FLOOR, NATIONAL CITY CENTER 1900 EAST NINTH STREET CLEVELAND, OH 44114			EXAMINER DU, THUAN N	
			ART UNIT 2116	PAPER NUMBER
			NOTIFICATION DATE 01/28/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket1@thepatentattorneys.com
hholmes@thepatentattorneys.com
osteuball@thepatentattorneys.com

mn

Office Action Summary	Application No. 10/779,300	Applicant(s) POWERS ET AL.	
	Examiner Thuan N. Du	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-24 is/are allowed.
- 6) ☒ Claim(s) 1-19 and 25-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment (dated 10/31/07).
2. Claims 1-27 are presented for examination.
3. Applicant's arguments with respect to claims 1-19 and 25-27 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-19 and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over George et al. [George], U.S. Patent. No. 6,772,241 in view of May et al. [May], U.S. Patent No. 6,366,522.

6. Regarding claim 1, George teaches a system that facilitates state machine power management, comprising:

a state management component (ICH 230) that receives at least one signal that is directed to a state machine (processor 210) [Fig. 2; col. 3, lines 41-46], the state management component evaluates the signal to ascertain whether at least one of a coprocessor or the state machine services the signal [col. 3, lines 47-50];

Art Unit: 2116

the coprocessor (250) services the signal in order to provide a timely response to the signal and facilitate state machine power management without transitioning the state machine to a high power state [col. 4, lines 32-41 (Limited On: processor is off and coprocessor is on)]; and

the state machine services the signal upon evaluation that the coprocessor cannot service the signal without transitioning the state machine to the high power state [col. 4, lines 44-48 (“system wake event interrupt” is the signal that the coprocessor cannot service)].

George does not teach that the processing requirement of the signal is determined.

May teaches processing requirement of an application is determined and controlling the power state for the system based on the determined requirement thereafter.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of George to determined the processing requirement as taught by May because it would increase the reliability and reduce the power consumption of the system by providing high power to the system (wake up main processor) only when needed.

7. Regarding claim 2, George teaches that the state machine employs the state management component (230) to receive the signal when the state machine transitions from a high power state to a lower power state (the ICH 230 can still receive signal when the processor 210 is in low power state) [col. 3, lines 27-35, 41-50].

8. Regarding claim 3, George teaches that the lower power state comprises one of a standby state, a suspend state, a hibernate state, a sleep state, a deep sleep state, and an off state [col. 3, lines 27-30].

Art Unit: 2116

9. Regarding claim 4, George teaches that the system comprises an analysis component that interprets the signal (in order to determine whether it is a sleep command or a wake command, George must include an analysis component) [col. 4, lines 26, 44].
10. Regarding claim 5, George teaches that the system comprises a decision component that determines whether the coprocessor should respond to the signal [determining whether the coprocessor exist or not (to response to the interrupts), col. 4, lines 32, 37-38].
11. Regarding claim 6, George teaches that the state management component is activated by the state machine requesting services of the state management component and the state management component detecting the state machine transitioned to the lower power state [col. 3, lines 41-46; col. 4, lines 8-23].
12. Regarding claim 7, George teaches that the system consumes less power when the coprocessor responds to the signal [col. 4, lines 13-16].
13. Regarding claim 8, George teaches that the state component is employed to manage wake states for a plurality of state machines [col. 4, lines 8-10, 44-48].
14. Regarding claim 9, George teaches that the system comprises an intelligence component that facilitates at least one of interpreting the signal [col. 4, line 25-26, 44-46; interpreting whether the signal is a wake or a sleep signal] and distributing the signal for processing [col. 4, lines 8-16].
15. Regarding claim 10, George teaches that the state management component invokes the state machine to respond to the signal when the coprocessor cannot respond to the signal [col. 4, lines 44-48 (“system wake event interrupt” is the signal that the coprocessor cannot service)].

Art Unit: 2116

16. Regarding claim 11, George teaches that the signal is transmitted over one of a network, a backplane, and a bus [col. 3, lines 43-46].

17. Regarding claim 12, George teaches that the state management component is employed to reduce state machine load for a state machine in a full power state [In Full ON, both processors 210 and coprocessor 250 are ON, col. 3, lines 28-29, the coprocessor is used to help the processor (reduce load) to perform complex task, col. 1, lines 23-25].

18. Regarding claims 13-19 and 25-27, they do not teach or further define over the limitations recited in claims 1-12 above. Therefore, claims 13-19 and 25-27 are also unpatentable over George in view of May for the same reasons set forth in the rejected claims 1-12 above.

Allowable Subject Matter

19. Claims 20-24 are allowed.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan N. Du whose telephone number is (571) 272-3673. The examiner can normally be reached on Monday-Friday: 7:30 AM - 4:00 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rehana Perveen can be reached at (571) 272-3676.

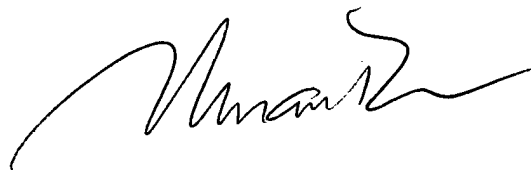
Central TC telephone number is (571) 272-2100.

The fax number for the organization is (571) 273-8300.

Art Unit: 2116

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

TD
January 10, 2008



THUAN N. DU
PRIMARY EXAMINER